

Wochnick, Heather M CIV USN (US)

From: Callaway, Rex CIV NAVFAC SW
Sent: Wednesday, September 08, 2010 11:50
To: Steinberg, Barry P.
Cc: Amy Brownell; Celena.Chen@sfgov.org; Gilkey, Douglas E CIV OASN (EI&E), BRAC PMO West; Elaine.Warren@sfgov.org; Larson, Elizabeth A CIV OASN (EI&E), BRAC PMO West; Ericka M. Hailstocke-Johnson; Schlossberg, George R.; Gordon E. Hart; Joshua A. Bloom; Cummins, John M CIV NAVFAC SW; Forman, Keith S CIV OASN (EI&E), BRAC PMO West; Kito, Melanie R CIV NAVFAC SW; RBrandt@Geosyntec.com; Robert Elliott; RStenson@waterboards.ca.gov; stephen.proud@lennar.com; Macchiarella, Thomas L CIV OASN (EI&E), BRAC PMO West; Carr.Robert@epamail.epa.gov
Subject: HPS Early Transfer: Navy Draft TSRS and Comments on SFRA Proposed Revisions of Definition of "Ineligible Work"
Attachments: HPS.Def.Inelig.Work.Sept.10.doc; TSRS_draft_9-8-10_Clean Navy.doc
Categories: Hunters Point

Barry, et al:

I have attached the Navy's first draft of the TSRS for proposed HPS Parcels B and G ETCA. It reflects the Navy's response to the SFRA proposed definitions and "Responsibility Matrix" forwarded by George Schlossberg to the Navy on 28 Jul 10 and addresses other ETCA administrative issues. I've also attached the Navy's response to SFRA's proposed revisions to the "ineligible work" ETCA definition because it is not included in the TSRS. We look forward to our meeting next week.

-Rex Callaway

KEY DEFINED TERMS USED IN ETCA RESPONSIBILITY MATRIX

PAGE 1.

SFRA DRAFT 7/28/2010

NAVY COMMENTS, 8 SEPT 10

KEY DEFINED TERMS USED IN ETCA RESPONSIBILITY MATRIX

Ineligible Work *(Same as Section 218 of the last version of the ETCA except where new language is provided)*

The term “**Ineligible Work**” means the performance of any or more of the following work:

- (a) LBP and ACM: Same as last version of ETCA **(Navy OK)**
- (b) Pesticides: Same as last version of ETCA **(Navy OK)**
- (c) Management of waste from Redevelopment: Delete and consolidate with (g) below **(Navy Agree with consolidation, see comments below)**
- (d) Reuse Plan changes: Same as last version of ETCA. **(Navy OK)**
- (e) *Minor change to last version of ETCA:*

Management and disposal of construction and demolition debris except to the extent such debris is generated in the course of ~~an activity required by the TSRS~~ conducting the **Environmental Services**, such as the demolition of hardscape to install a monitoring well. **(Navy OK)**

- (f) Contaminants in buildings: Same as last version of ETCA. **(Navy OK)**
- (g) *Change to last version of ETCA:*

Any activity, including management and offsite disposal of excavated contaminated soil or solid waste, associated with disturbing or altering a cover, cap or other component of an environmental remedy installed pursuant to the AOC, except to the extent such disturbance or alteration is necessary ~~to comply with the AOC as a result of remedy failure.~~ to address an Unknown Condition Discovered Outside the Course of Remediation.

KEY DEFINED TERMS USED IN ETCA RESPONSIBILITY MATRIX

PAGE 2.

(h) Compliance activities: Same as last version of ETCA.(Navy OK)

(i) Minor change to last version of ETCA:

Any other work or activity that is not related to performing the Environmental Services.
~~(1) achieving "Regulatory" for releases of hazardous substances or petroleum within the ACES, or (2) performing associated "Long term Obligations."~~ (Navy OK)

(j) Regulatory Enforcement: Same as last version of ETCA.(Navy OK)

(k) LUC violations: Same as last version of ETCA.(Navy OK)

(l) SFRA failure to maintain a remedy: Same as last version of ETCA.(Navy OK)

APPENDIX 9

Technical Specifications and Requirements Statement

1.0 INTRODUCTION

In accordance with the terms of the Early Transfer Cooperative Agreement (ETCA), this Technical Specifications and Requirements Statement (TSRS) provides the U.S. Department of the Navy's (Navy) general specifications for the San Francisco Redevelopment Agency (SFRA) to conduct Environmental Services, address environmental scheduling and regulatory issues, and assume responsibility for Regulatory Closure of the Area Covered by Environmental Services (ACES).

Once performed, the Environmental Services should also satisfy the Administrative Order on Consent (AOC), between SFRA, U.S. Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), and San Francisco Bay Regional Water Quality Control Board (RWQCB) (the "Environmental Regulatory Agencies") and achieve Regulatory Closure. Implementation of the Environmental Services will also satisfy the remedial action requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and other applicable environmental laws and regulations regarding remediation of the ACES.

1.1 Background

As provided in Section 301 of the ETCA, SFRA will conduct certain cleanup efforts at the ACES and the Navy will provide an appropriate level of oversight. This document is meant to support and be consistent with the ETCA. If inconsistencies are found between this TSRS and the ETCA, the ETCA shall control. If inconsistencies are not resolved after referring to the ETCA, the parties will work toward a resolution in accordance with Section 1001 of the ETCA.

1.2 Early Transfer and Cooperative Cleanup

The Navy and SFRA intend to complete an early transfer of the ACES pursuant to Section 120(h)(3)(C) of CERCLA in order to facilitate redevelopment of the property. SFRA's responsibilities for the ACES are described in the ETCA and specific remedial actions are summarized in the remedial activities table (see Table 1). Table 1 lists those environmental sites of the ACES requiring remediation by SFRA and generally describes the activities to be accomplished for each site. Activities described in Table 1 may be modified by SFRA pursuant to the ETCA, as long as said modifications do not affect SFRA's ability to achieve Regulatory Closure under the amount funded in the ETCA. Activities described in Table 1 will be undertaken in conjunction with redevelopment activities where the opportunity exists.

The SFRA shall complete Environmental Services for Environmental Conditions that are necessary to (1) comply with the CERCLA Records of Decision (ROD) and applicable Remedial

Design Package reports (including Design Basis Report, Remedial Action Monitoring Plan [RAMP], Land Use Control Remedial Design [LUC RD], and Operation and Maintenance [O&M] Plan) and Remedial Action Work Plan (RAWP) reports, (2) address AOC requirements between SFRA and the Environmental Regulatory Agencies, (3) achieve Regulatory Closure throughout the ACES, and (4) comply with Long-term Obligations. The SFRA shall conduct and bear the cost of such services addressing Known Conditions and Unknown Conditions Discovered During the Course of Remediation even if such costs exceed the amount of ETCA funds provided and any insurance proceeds. Table 2 summarizes the breakdown of responsibility between SFRA and the Navy for the types of Environmental Conditions that may be found on the ACES.

1.3 Applicable and Relevant Documents

Appendix A contains a list of some of the key documents that are applicable and relevant to this TSRS. See the HPNS Administrative Record files for additional information that may be applicable or relevant.

1.4 Definitions

1.4.1 Environmental Conditions

The term “Environmental Condition(s)” means a discharge, release, or threatened discharge or release into the environment of a hazardous substance, waste, oil, or petroleum product within the scope of any of the following:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601 et seq.;
- Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6901 et seq.;
- California Hazardous Waste Control Act (California Health and Safety Code Sections §25100 et seq.);
- California Hazardous Substances Account Act (California Health and Safety Code Sections §25300 et seq.);
- Porter-Cologne Water Quality Control Act (California Water Code §13000 et seq.);
- Or similar federal or state environmental law.

1.4.2 Environmental Services

The term “Environmental Services” means performance of the activities necessary to achieve Regulatory Closure and comply with Long-Term Obligations with respect to (i) Known Conditions and Unknown Conditions Discovered During the Course of Remediation (including “replacement” remedial covers [soil, asphalt, and/or concrete] that replace initial remedial covers installed pursuant to the RODs), even if the funds provided under this Agreement, and any insurance proceeds from the Environmental Insurance Policies, have been exhausted and even if the term of the Environmental Insurance Policies has expired; and (ii) Unknown Conditions Discovered Outside the Course of Remediation for the chemicals listed in tables 3a and 3b, even if the funds provided under this Agreement, and any insurance proceeds from the Environmental Insurance Policies, have been exhausted and even if the term of the Environmental Insurance

Policies has expired; and (iii) Unknown Conditions Discovered Outside the Course of Remediation for chemicals not listed in tables 3a and 3b, but only to the extent such activities are funded by the Environmental Insurance Policies or to the extent funding is unavailable as a result of the failure of SFRA or a named insured to comply with the requirements of the Environmental Insurance Policies.

The term Environmental Services does not include the performance of any activities related to the following: Navy Retained Conditions; Ineligible Work; or Special Exclusions.

1.4.3 Known Conditions

The term “Known Conditions” means an Environmental Condition involving one or more chemicals of concern (1) identified as requiring remedial action at an Installation Restoration (IR) site or other location specified in the CERCLA RODs, or (2) identified as requiring corrective action by a Petroleum Corrective Action Plan (see ETCA Section 232).

1.4.4 Navy Remedy Failure

The term “Navy Remedy Failure” means any circumstance, not due to negligence by SFRA, where a remedy selected in the CERCLA RODs or subsequent CERCLA decision document issued by the Navy has been properly implemented by SFRA in accordance with the RODs, approved remedial design documents, and the ETCA and is determined by EPA not to have achieved the ROD’s remedial action objectives. “Navy Remedy Failure” does not include volatile organic compound (VOC) vapor migration and accumulation caused by redevelopment activities.

1.4.5 Navy Retained Conditions

The term “Navy Retained Conditions” means Unexploded Ordnance (as defined in ETCA Section 223); Military Munitions (ETCA Section 224); chemical, radiological, or biological warfare agents; and Radiological Materials (ETCA Section 214). The term Navy Retained Conditions does not include Ineligible Work as defined in Section 218 of the ETCA.

1.4.6 Regulatory Closure

The term “Regulatory Closure” means Environmental Regulatory Agency approval, by issuance of a Certificate of Completion, of one or more Remedial Action Completion Reports (RACR) encompassing the entire ACES (or encompassing the portion of the ACES or particular condition with respect to which the term is used) pursuant to the procedures set forth in the AOC and, to the extent the Environmental Services includes activities not covered by the AOC, such as an Unknown Condition Discovered Outside the Course of Remediation involving a petroleum release, written Environmental Regulatory Agency approval that no further action is required for that condition.

1.4.7 Special Exclusions

The term “Special Exclusions” means any of the following:

- 1) Activities and associated costs necessary to conduct any additional remedial action required by an Amendment to, or Explanation of Significance Difference (ESD) from, the Parcels B and G CERCLA RODs, except to the extent attributable to any of the following:
 - a) The negligence of the SFRA or any party acting on its behalf, including noncompliance with or failure to adequately enforce approved CERCLA institutional control land use restrictions;
 - b) Requests by the SFRA or other party acting on behalf of the SFRA for modification of a remedial action selected in the Parcels B and G CERCLA RODs that is not required as a result of a Navy Remedy Failure, or from the discovery of a Navy Retained Condition or one of the other Special Exclusions identified in paragraphs 2 through 7 of this Section;
 - c) Unknown conditions discovered during the course of remediation.
 - d) Unknown conditions for chemicals listed in tables 3a and 3b discovered outside the course of remediation.
- 2) Activities and associated costs necessary to address any Environmental Condition migrating onto Parcel B from IR Site 25 in Parcel C or an Environmental Condition migrating onto Parcel G from Building 406 (also known as the IR Site 36 groundwater contamination/treatment area) in Parcel E.
- 3) Activities and associated costs, other than those required to implement the portions of the CERCLA RODs requiring the rebuilding of portions of the revetment wall on the Parcel B shoreline, necessary to address any Environmental Condition that has migrated onto Parcel F from Parcel B, except to the extent attributable to any negligence of the SFRA or any party acting on its behalf.
- 4) Any activity and associated cost identified as the responsibility of the Navy in the Amended Federal Facility Agreement (FFA). (Navy Note: Subject to further review and reconsideration as FFA amendment requirements are negotiated).
- 5) The performance of CERCLA five-year reviews for years 2013 and 2018 for remedies selected in the CERCLA RODs issued by the Navy.
- 6) Any activity and associated cost related to an Unknown Condition for chemicals not listed in tables 3a and 3b, Discovered Outside the Course of Remediation, that is not funded by the Environmental Insurance Policies, provided the unavailability of insurance funds is not the result of the failure of SFRA or a named insured to comply with the requirements of the Environmental Insurance Policies.

- 7) *(Place holder for any additional exclusions in the insurance policies mutually agreed by Navy and SFRA).*

1.4.8 Unknown Conditions Discovered During the Course of Remediation

The term “Unknown Conditions Discovered During the Course of Remediation” means Environmental Conditions that are discovered in the course of implementing the TSRS, including “replacement” remedial covers (soil, asphalt, and/or concrete) that replace original remedial covers installed pursuant to the RODs and are not Known Conditions, Special Exclusions, or Navy Retained Conditions. .

1.4.9 Unknown Conditions Discovered Outside the Course of Remediation

The term “Unknown Conditions Discovered Outside the Course of Remediation” means Environmental Conditions other than Known Conditions and Unknown Conditions Discovered During the Course of Remediation. Tables 3a and 3b list the potential chemicals that may be present in media at Parcels B and G based on the history of past processes, operations, and activities at HPNS. Environmental Insurance coverage shall not exclude these Reasonably Expected Environmental Conditions during the term of liability coverage.

2.0 TECHNICAL SERVICES REQUIRED

The major component activities of the TSRS are outlined below.

1. Project management
2. Remedial action work plan
3. Remedy implementation
4. Environmental insurance
5. RACR and Regulatory Closure documentation
6. Public involvement
7. Submittal of documents and achievement of project schedule

SFRA shall provide the necessary qualified and licensed personnel, equipment, and resources to successfully execute the remediation activities described in the remedial activities table (Table 1) in accordance with the ETCA. Project activities and responsibilities are outlined in the following sections and additional details on project activities listed below are included in Section 3.0 of this TSRS. This TSRS more fully specifies the Environmental Services SFRA will conduct under the ETCA on behalf of the Navy.

2.1 Project Management

The complexity, magnitude, and unique nature of the cleanup at the ACES requires coordination of project activities to ensure that stakeholders are kept informed of the project status, existing or potential problems, and any changes that may be required to prudently manage the project. Project stakeholders include the Department of the Navy Base Realignment and Closure (BRAC) Program Management Office (PMO), the Environmental Regulatory Agencies, and SFRA.

SFRA will use this TSRS to guide the cleanup of the ACES in conjunction with redevelopment while ensuring consistency with CERCLA, the NCP, and other applicable environmental laws and regulations. To ensure that the requirements of CERCLA and the NCP are being met, the Navy shall consult with SFRA, including review, comment, and concurrence on documents. Table 4 presents documents which the Navy will receive for (1) information only, (2) review and comment, or (3) review and concurrence.

SFRA shall maintain a project repository, as well as provide copies to the Navy for the Navy's maintenance of the Administrative Record files as required by CERCLA, the NCP, and other applicable laws and regulations. SFRA shall be required to include the draft and final RAWP documents and related review comments, responses to comments, technical support documents, etc in a project repository as per Section 3.2 of this TSRS and also provide copies to the Navy for inclusion by the Navy in the Navy's CERCLA restoration post-decision record file. SFRA shall also be required to provide copies of documents to the Navy that it develops and that the Navy relies upon for ROD amendments or ESDs (see Section 300.825(a)(1) of the NCP). Documents provided to the Navy for inclusion in the Navy's CERCLA restoration post-decision record file shall meet the requirements listed in Attachment 1.

SFRA shall also prepare and submit periodic progress reports (as defined in Section 3.1) to the Navy that document technical progress to date, depict upcoming work, and describe any technical issues confronted with successful or proposed solutions. Finally, SFRA shall hold conference calls, as defined in Section 3.3, with the Navy representative on an as-needed basis as determined by the Navy to discuss the progress of the cleanup of the ACES and the status of ongoing documents and reports being reviewed by the Navy representative. The Navy representative shall be the BRAC Environmental Coordinator, or designated successor. Additional details on project management responsibilities are included in Sections 3.1 through 3.3 of this TSRS.

2.2 Remedial Action Work Plans

SFRA shall prepare the RAWPs to provide for the construction of the remedy as set forth in design plans and specifications in the approved final remedial design documents ("Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18" [ChaduxTt, date TBD], and "Final Remedial Design Package Parcel G" [ChaduxTt, date TBD]). SFRA shall submit draft and draft final RAWPs to the Navy and Environmental Regulatory Agencies for review, comment, and concurrence. The RAWPs may also include any revisions to the approved final remedial designs to address modifications desired by SFRA to support redevelopment. Any revisions to the remedial designs must still meet the requirements of the CERCLA RODs. The RAWPs shall describe (1) preconstruction activities, including permitting, (2) construction activities, and (3) post construction activities, including preparation of a new or revised O&M plan to reflect the remedy as actually constructed as well as to account for changes in standards or improved materials. The RAWPs shall include plans associated with construction including, but not limited to dust control plan, stormwater pollution prevention plan, construction quality control plan, sampling and analysis plans, and health and safety plan. The RAWPs shall also include a schedule for implementation of all remedial action tasks.

2.3 Remedy Implementation

SFRA shall use funds provided under the ETCA to conduct the tasks outlined here. SFRA shall ensure that all remedial actions are performed in accordance with the terms of the above documents and in support of the reuse specified in the reuse plan prepared by SFRA (the “1997 Reuse Plan”). SFRA is responsible for all additional costs associated with any change in reuse from the 1997 Reuse Plan. All changes in land use from the 1997 Reuse Plan that increase the amount or scope of remedial activities on the ACES, or compromise the effectiveness of the Covenants to Restrict Use of Property (CRUP) or land use controls found in the LUC RDs, or require the modification, variance, or termination of such restrictions, shall be at the sole expense and responsibility of SFRA. If such a change is planned, SFRA shall notify the Navy representative before proceeding with any of its associated obligations under the ETCA. Regardless of any changes in reuse, SFRA must ensure that all remedial activities contemplated for the ACES meet the requirements of CERCLA and the NCP, and for petroleum-related corrective actions, all applicable federal or state laws.

SFRA shall be responsible for developing documents associated with the remedial actions to achieve Regulatory Closure.

The Navy has followed the CERCLA process in the prior characterization of environmental conditions, analysis of remedial action alternatives, and selection of the remedy. Site characterization data are available in various reports referenced in Appendix A herein and in the Administrative Record files. The site characterization data have been used to select the remediation components and the site-specific activities summarized in the remedial activities table (Table 1). The remedial actions, including institutional controls, for the ACES will comply with the AOC, CERCLA, the NCP, and other applicable laws and regulations and shall be protective of human health and the environment. The following sections describe the individual components of the remedy to be implemented at the ACES.

Regulatory Closure for covers and shoreline revetment must be achieved no later than 6 years after the date of execution of the ETCA.

2.3.1 Soil Vapor Extraction (SVE) System Expansion and Operation

SFRA shall expand and operate the SVE system inside Building 123 as described in the “Final Remedial Design Package for Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD). SFRA shall operate the system in pulsed and focused extraction modes to reduce soil gas concentrations to below soil gas action levels for residential reuse or until asymptotic conditions are reached without reasonable indication of further reduction based on system monitoring results. SFRA shall adjust the area requiring institutional controls (ARIC) to address potential accumulation of VOC vapors in enclosed structures based on soil gas sample results if operation of the SVE system does not reduce soil gas concentrations to below soil gas action levels for residential reuse. SFRA shall design and implement engineering controls as needed to prevent exposure to VOCs in soil gas that may accumulate within Building 123 or any future enclosed structures that may be built on the adjusted ARIC for VOC vapors. SFRA shall decommission the SVE system after approval from the Environmental Regulatory Agencies. Details on

operation of the SVE system including monitoring, reporting, and O&M activities are contained in the “Final Remedial Design Package for Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD).

Performance standards: action levels for soil gas based on residential reuse as presented in “Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Shipyard” (ChaduxTt, April 30, 2010) or revised values that may be developed based on the procedures detailed in the memorandum and subsequently approved by the Environmental Regulatory Agencies.

2.3.2 Groundwater Remediation

SFRA shall inject polylactate at the IR Site 10 VOC plume for further source control and to enhance natural attenuation. SFRA shall track the progress of natural attenuation processes by monitoring groundwater. SFRA shall continue monitoring until concentrations of chemicals in groundwater are below groundwater remediation goals or until groundwater concentrations are shown to not pose a risk to human health via vapor intrusion. Soil gas monitoring above the plume will be used to demonstrate soil gas concentrations are below soil gas action levels for residential reuse to allow reduction in the frequency or cessation of groundwater monitoring at the IR 10 VOC plume area. Approval from the Environmental Regulatory Agencies will be required in advance for changes in the frequency or extent of groundwater monitoring. Details on the extent of the IR Site 10 VOC plume as well as information on monitoring and reporting are included in the “Final Remedial Design Package for Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD). Also refer to Section 2.3.6 of this TSRS for more information on long-term groundwater monitoring.

Performance standards: (1) remediation goals for groundwater as presented in the approved CERCLA RODs and the RAMPs contained in “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD), or (2) action levels for soil gas based on residential reuse as presented in “Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Shipyard” (ChaduxTt, April 30, 2010) or revised values that may be developed based on the procedures detailed in the memorandum and subsequently approved by the Environmental Regulatory Agencies.

2.3.3 Covers over Soil

SFRA shall construct a durable cover over the ACES. Soil shall be covered with a material that will not break, erode, or deteriorate such that the underlying soil becomes exposed. Examples of acceptable covers include a minimum 6 inches of asphalt or a minimum of 2 feet of clean imported soil as presented in the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18”, (ChaduxTt, date TBD) and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD). Other standard construction practices for roads, sidewalks, and buildings that meet the requirements of the San Francisco Department of Public Works or the San Francisco Department of Building Inspection codes [citations to be provided by City/SFRA] will be adequate as covers. Any other cover designs must be reviewed and approved by the Environmental Regulatory

Agencies and the Navy before they are implemented at the ACES. Soil imported for covers must be tested to (1) confirm it does not contain contaminants at concentrations exceeding remediation goals, and (2) confirm it contains less than 0.25 percent asbestos, and (3) confirm it is consistent with DTSC imported soil guidance “Information Advisory Clean Imported Fill Material” (DTSC 2001).

Performance objectives: Durable cover that (1) meets the specifications of the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD), or (2) meets the requirements of San Francisco Department of Public Works or the San Francisco Department of Building Inspection codes, or (3) meets the approval of the Environmental Regulatory Agencies and the Navy.

2.3.4 Shoreline Revetment

SFRA shall construct a shoreline revetment for the shoreline at Parcel B to prevent erosion and migration of underlying soil and sediment into San Francisco Bay. An example of an acceptable revetment design is presented in the “Final Remedial Design Package for Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD). Any other revetment designs must be reviewed and approved by the Environmental Regulatory Agencies and the Navy before they are implemented at the ACES. The revetment design objectives include:

1. Withstand the impact of anticipated maximum wave energy
2. Account for water levels from tidal fluctuations and potential sea level rise
3. Encapsulate all potentially contaminated sediment, extending to the parcel boundary, to prevent contact by human or ecological receptors
4. Minimize any loss of bay area or volume and any impact on tidal flats
5. Account for future use of the shoreline area, including the potential for damage (vandalism and from foot traffic) as well as to allow public access to the shoreline

Performance objectives: Shoreline revetment that (1) meets the specifications of the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), or (2) meets the approval of the Environmental Regulatory Agencies and the Navy.

2.3.5 Control of Soil Gas

SFRA shall design and implement engineering controls as needed to prevent exposure to VOCs in soil gas that may accumulate within existing or future enclosed structures at concentrations that would pose unacceptable risk via indoor inhalation of vapors, based on the planned reuse. The Navy will establish an initial ARIC for VOC vapors based on soil gas surveys conducted prior to redevelopment. The initial ARIC will be established in the technical memorandum summarizing the results of the soil gas surveys to be prepared by the Navy following completion of the surveys and submitted to the Environmental Regulatory Agencies for review, comment, and approval. Objectives for control of soil gas can be grouped into the following broad categories:

Structures: For all structures to be constructed within the ARIC for VOC vapors, SFRA shall design and install vapor mitigation systems to prevent unacceptable exposure of enclosed building occupants to soil gas. Vapor mitigation systems shall be installed and maintained by SFRA consistent with DTSC guidance (“Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, Interim Final” dated December 15, 2004, and revised on February 7, 2005). SFRA shall develop remedial designs for vapor mitigation systems and include them in RAWPs to be reviewed and approved by the Environmental Regulatory Agencies and the Navy before the systems are installed.

Prevention of migration pathways: For all subsurface utilities to be constructed across the boundary of the ARIC for VOC vapors, SFRA shall design and install vapor mitigation systems to prevent preferential migration of soil gas along subsurface utility trenches. The vapor mitigation system shall be installed and maintained consistent with DTSC guidance (“Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, Interim Final” dated December 15, 2004, and revised on February 7, 2005) and shall provide a mechanism to vent accumulated soil gas to the surface to prevent subsurface migration. SFRA shall develop remedial designs for vapor mitigation systems and include them in RAWPs to be reviewed and approved by the Environmental Regulatory Agencies and the Navy before the systems are installed.

The initial ARIC for VOC vapors may be modified, with approval of the Environmental Regulatory Agencies and the Navy, as soil and groundwater contamination areas that are producing unacceptable vapor inhalation risks are reduced over time or in response to further soil, vapor, and groundwater sampling and analysis for VOCs that establishes that areas originally included in the initial ARIC for VOC vapors do not pose an unacceptable potential exposure risk due to VOC vapors. SFRA may petition the Environmental Regulatory Agencies and the Navy in accordance with the AOC to revise the extent of the ARIC for VOC vapors as conditions change on the ACES over time.

Performance standards: (1) action levels for soil gas based on residential reuse as presented in “Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Shipyard” (ChaduxTt, April 30, 2010) or revised values that may be developed based on the procedures detailed in the memorandum and subsequently approved by the Environmental Regulatory Agencies, and (2) requirements for vapor mitigation in “Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, Interim Final” dated December 15, 2004, and revised on February 7, 2005.

2.3.6 Long-term Groundwater Monitoring

SFRA shall monitor elevations of and chemical concentrations in groundwater according to the requirements in the RAMPs that are included in “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD). SFRA shall coordinate with the Environmental Regulatory Agencies in accordance with the AOC regarding changes to groundwater monitoring and shall submit summary reports in accordance with the RAMPs. The general objectives for monitoring groundwater include: (1) monitor the potential migration of contaminants into previously

uncontaminated areas and potential migration toward San Francisco Bay, and (2) monitor changes in concentrations within a plume or near individual wells.

Performance standards: (1) remediation goals and trigger levels for groundwater as presented in the approved CERCLA RODs and the RAMPs contained in “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD), or (2) action levels for soil gas based on residential reuse as presented in “Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Shipyard” (ChaduxTt, April 30, 2010) or revised values that may be developed based on the procedures detailed in the memorandum and subsequently approved by the Environmental Regulatory Agencies.

2.3.7 Five-year Reviews

SFRA shall prepare five-year review reports beginning with year 2023 and submit them to EPA and the Navy for review, comment, and concurrence. Reports shall be similar to previous five-year review reports for HPNS and consistent with EPA guidance. The Navy will prepare the five-year review reports for 2013 and 2018 and submit them to EPA for review and comment.

2.3.8 Implementation of Institutional Controls and other Long-Term Obligations

SFRA shall implement the institutional control requirements of the LUC RDs that are included in the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD), and CRUP(s) and Deed(s) that are signed and recorded at the time of transfer of title. Implementation includes completion of annual inspections and reports. SFRA shall ensure controls remain in place and shall implement corrective actions for violations. Details are contained in the LUC RD documents that are included in “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD).

SFRA shall implement the requirements of the O&M plans that are included in the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD), as well as revisions to the O&M plans that may be made and approved by the Environmental Regulatory Agencies pursuant to the AOC to reflect the remedy as actually constructed. Implementation includes regularly scheduled inspections and reports and required maintenance to ensure the remedy continues be effective and protect human health and the environment.

2.4 Environmental Insurance

SFRA shall obtain Environmental Insurance (“EI”) to prevent delays in the cleanup and to protect the Navy and SFRA from cost overruns and regulatory re-openers. The term “regulatory re-openers” means any legal requirements for additional remediation that arise after Regulatory Closure has been achieved. By way of example and not limitation, whether a circumstance is a regulatory re-opener is illustrated as follows: (1) additional vapor mitigation necessary because

regrading or excavating in soil creates new pathways for soil gas migration and potential exposure in areas that were previously dropped from the ARIC for VOC vapors would be a regulatory re-opener, but (2) enactment and promulgation of new laws, regulations, or standards requiring more stringent cleanups would not be considered a regulatory re-opener. Prior to the conveyance of any portion of the ACES to SFRA, SFRA shall procure the Environmental Insurance Policies attached as Appendix 4 to the ETCA providing “cost cap” or “stop loss” coverage, or equivalent, for cost overruns associated with implementing the Environmental Services and further providing additional pollution legal liability or similar coverage, to the extent available, for addressing unknown contaminants and for third party liability claims.

The SFRA or its Contractor shall procure Environmental Insurance as follows:

1. Remediation Stop Loss (“RSL”) Insurance Policy (also known as “Cleanup Cost Cap or CCC”) and thereafter carry and maintain the EI coverage in full force and effect over the duration of the TSRS. The EI (RSL/CCC) policy shall meet or exceed the following provisions:

- a. Provides coverage applicable to the ACES, Regulatory Closure performance objectives, and performance standards identified in the TSRS, and confirms that all the obligations assumed under the ETCA are incorporated into the definition of the insured "remedial plan" as specified in the insurance endorsements.
- b. Provides coverage, at a minimum, for seven (7) years.
- c. Provides coverage, at a minimum, equal to twice the negotiated price of the work outlined in the TSRS.
- d. Coverage to include a Waiver of Subrogation, as applicable, for claims associated with matters and scope items addressed in the TSRS that the SFRA or its Contractor or insurance company may have against the Navy, its officers, agents or employees.
- e. Coverage provided from a carrier rated A.M. Best’s A- (Excellent) and Financial Size Category (FSC) IX or better.
- f. Requires that technical and schedule progress reports to be provided to the Navy on the same schedule that they are provided to the insurance carrier.
- g. Contains no "War Exclusion" or contains a limited war exclusion that excludes cleanup costs caused solely by a hostile or violent act of war after the inception date.
- h. Provides the Navy the primary right to assign the policy to a replacement contractor acceptable to the insurance company should the SFRA and/or its Contractor default or otherwise be unable to meet the Regulatory Closure requirements.
- i. Names the Navy as an Additional Insured.

2. Environmental Impairment Liability/Pollution Legal Liability (“EIL/PLL”) Policy which shall meet or exceed the following provisions:

- a. Provides EIL/PLL with coverage for on- and off-site, third-party Bodily Injury, Property Damage, Cleanup Costs, Costs associated with Regulatory “Re-openers,” and Defense Costs for the environmental liability incurred at the site under the indemnity provisions of the contract by the contractor, including but not limited to coverage for potential tort liability relating to VOC soil vapors. This policy shall have a limit of liability of \$20,000,000 which cannot be combined with the Professional Liability policy. If this

coverage element is provided as part of the RSL/CCC policy, the \$20,000,000 limit for this coverage section shall be additive to the required limits on the RSL/CCC policy. This EIL/PLL coverage may exclude cleanup obligations otherwise insured in the stop loss/cost cap policies and may also exclude contaminants outside the scope of services outside of the Environmental Insurance Policies.

- b. Policy shall have, at a minimum, a term of ten (10) years and preferably twenty (20) years if available and not cost prohibitive.
- c. Provides a Waiver of Subrogation for claims associated with matters and scope items addressed in the TSRS that the Contractor or insurance company may have against the Navy.
- d. Names the Navy as an Additional Insured.
- e. Is Assignable to a replacement contractor mutually agreeable to the EI provider.

2.5 Remedial Action Completion Report (RACR) and Regulatory Closure Documentation

SFRA shall submit RACRs for the ACES. SFRA may select whether a single RACR or multiple RACRs are appropriate for each remedial component at the ACES. Regulatory Closure will be documented by receipt of a Certificate of Completion from the Environmental Regulatory Agencies upon approval of the RACR as provided in the AOC. Each RACR will provide all information required by the Environmental Regulatory Agencies pursuant to the AOC and receipt of the Certificate of Completion will document the Environmental Regulatory Agencies' written concurrence as to the completion of Regulatory Closure.

2.6 Public Involvement

The opportunity for public involvement is essential for obtaining community input and maintaining community understanding and support for the cleanup actions on the ACES. SFRA shall be responsible for notification to, involvement with, and solicitation of input from the public as required by the AOC, CERCLA, and the NCP, in coordination with the Environmental Regulatory Agencies and the Navy. Additionally, the Navy will continue to be involved with other property on HPNS not affected by this early transfer and will require coordination of public involvement activities. SFRA will provide to the Navy, in timely fashion, pertinent information regarding its public involvement activities associated with the cleanup actions at the ACES, in order for the Navy to meet its site-wide community relations requirements under the Community Involvement Plan, CERCLA, and the NCP. SFRA will be responsible for, in close coordination with the Navy, initiating, coordinating, and scheduling necessary public activities relating to the remedial activities on the ACES as required under the TSRS and AOC, including but not limited to, developing briefings, presentations, fact sheets, and legal notices; taking meeting minutes; preparing for and hosting public meetings; and sending articles to news media after coordination with the Environmental Regulatory Agencies, if necessary. SFRA shall also comply with other requirements for public participation as prescribed under the AOC.

SFRA shall prepare at least 2 fact sheets and hold at least 4 public meetings each year during the first 5 years after execution of the ETCA. SFRA shall prepare fact sheets and hold public meetings as necessary to inform the community during future years. SFRA shall provide the Navy with two paper copies and one electronic copy of all documents that are submitted to the

Environmental Regulatory Agencies and other parties for inclusion by the Navy in the Navy's CERCLA restoration post-decision record file. Documents provided to the Navy for inclusion in the Navy's CERCLA restoration post-decision record file s shall meet the requirements listed in Attachment 1.

2.7 Submittal of Documents and Achievement of Project Schedule

SFRA shall be responsible for completing the following major tasks prior to the ETCA termination:

- Complete all required remedial activities in the ACES, as required by the ETCA and AOC;
- Forward all reports and other documentation as required under the ETCA and AOC for review, and concurrence where specified (see Table 4), by the Navy representative;
- Upon completion of remedial actions for the ACES pursuant to the ETCA and AOC, forward all reports and make any other documentation requested by the Navy available for review by the Navy representative; and
- Following completion of all environmental services, excluding Long-Term Obligations, pursuant to the ETCA and AOC, submit proof of Regulatory Closure by obtaining Environmental Regulatory Agency Certification of Completion of the remedial action for such portion(s) of the ACES and delivering them to the Navy.

SFRA shall submit all deliverables as outlined in the TSRS and AOC to the Navy for review and concurrence where specified (see Table 4). SFRA shall be required to include the draft and final RAWP documents and related review comments, responses to comments, technical support documents, etc in a project repository as per Section 3.2 of this TSRS and also provide copies to the Navy for inclusion by the Navy in the Navy's CERCLA restoration post-decision record file. Documents provided to the Navy for inclusion in the Navy's CERCLA restoration post-decision record file shall meet the requirements listed in Attachment 1. SFRA shall also be required to provide copies of documents to the Navy that it develops and that the Navy relies upon for ROD amendments or ESDs (see Section 300.825(a)(1) of the NCP).

SFRA shall provide the Navy representative with two paper copies and one electronic copy of all documents and reports, including electronic copies of all geographic information system (GIS) data. The Navy shall have the right to review and provide comments on the documents and reports described above. The Navy representative will be responsible for reviewing documents and reports submitted to the Navy in a timely manner to support the project schedule, concurrent with regulatory review and schedules. The Navy representative reserves the right to obtain professional assistance, at its own cost, to review documents and reports that SFRA submits to the Navy.

If the Navy has comments or concerns, the Navy will notify SFRA within a reasonable time period, and discuss the concerns and comments and attempt to find a mutually agreeable resolution. If a mutually agreeable solution is not reached within 15 working days of the commencement of discussions between SFRA and the Navy, the parties reserve the right to

recommend that the dispute resolution process, as described in Section 1001 of the ETCA, be initiated.

The Navy representative will take no more than 30 working days to review and comment on documents received pursuant to the ETCA. In those instances where large or numerous documents are provided to the Navy at the same time, the Navy and SFRA shall agree upon a reasonable period in which the Navy will review and provide comments back to SFRA. The Navy's review of the documents and reports will be limited to the following scope:

- To ensure consistency with the ETCA and CRUPs
- To ensure consistency with CERCLA, the NCP, and any requirements applicable to non-CERCLA environmental services
- To ensure that ETCA funds that have been or will be spent are in compliance with the scope as defined in Section 101 of the ETCA and the environmental services as defined in Section 1.4.2 of the TSRS.

In addition, if the Navy representative deems it necessary, the Navy representative may access the ACES for purposes of on-site quality assurance and verification of remediation performance in accordance with the ETCA and deed covenant.

3.0 ADDITIONAL INFORMATION

3.1 Project Progress Reports

SFRA shall submit project performance and financial reports to the Navy in accordance with Sections 301(f)(2) and (3) of the ETCA. Reports shall address the following topics, as applicable: technical progress and work completed, total grant funds spent during the report period and total spent to date, projected work for the next period and estimated grant funds needed for the upcoming work, technical or regulatory issues that may impact project schedule, status of comments on reports, corrective measures taken, needed notifications in accordance with the ETCA, changes to the AOC, summary of public participation activities during the period and planned for the next period, etc.

3.2 Project Repository

SFRA shall maintain a project repository for the ACES environmental services at an easily accessible location that is open to the public near HPNS for project-related environmental remediation information generated after property transfer to SFRA.

3.3 Conference Calls and Briefings

SFRA shall brief the Navy representative on an as-needed basis but in no instance more often than monthly on the status of the remediation activities at the ACES or other concerns regarding

progress reports or other reports developed during the performance of the environmental services. Briefings will be conducted by means of conference calls that SFRA shall arrange.

Tables

- 1 Remedial Activities Required by the CERCLA RODs
- 2 Allocation of Responsibility Matrix
- 3a Reasonably Expected Environmental Conditions for Parcel B
- 3b Reasonably Expected Environmental Conditions for Parcel G
- 4 Document Matrix Identifying Navy Review Roles

Appendix

- A Applicable and Relevant Documents

Attachment

- 1 Environmental Work Instruction EVR.4, Implementing and Maintaining the CERCLA Administrative Record and Compendium at NAVFAC Southwest

TABLE 1
REMEDIAL ACTIVITIES REQUIRED BY THE CERCLA RODS

Parcel	Approximate Area	Remedial Action	Description
B	15,000 square feet	Soil Vapor Extraction	Operate SVE system at Building 123
B	7,500 square feet	Groundwater Treatment	Inject polylactate at IR Site 10 VOC plume
B and G	80 acres	Covers	Install covers over all areas; various cover types (soil, asphalt, buildings, etc)
B	1,500 linear feet	Shoreline Revetment	Construct revetment
B and G	80 acres ¹	Control of Soil Gas	Install vapor mitigation systems
B and G	Parcel-wide	Long-Term Obligations	Monitor groundwater in accordance with the RAMPs
			Conduct O&M activities in accordance with the O&M plans
			Implement and enforce ICs in accordance with the LUC RDs
			Prepare and submit 5-year review reports

Notes:

1 Area requiring controls for mitigation of VOC vapors will be refined based on the results of soil gas surveys.

IC Institutional control
 IR Installation Restoration
 LUC RD Land use control remedial design
 O&M Operation and maintenance
 RAMP Remedial action monitoring plan
 SVE Soil vapor extraction
 VOC Volatile organic compound

Refer to the “Final Remedial Design Package Parcel B, Excluding IR Sites 7 and 18” (ChaduxTt, date TBD), and “Final Remedial Design Package Parcel G” (ChaduxTt, date TBD) for the specific locations of these areas and for the RAMPs, LUC RDs, and O&M plans.

TABLE 2
ALLOCATION OF RESPONSIBILITY MATRIX

Table 2, Allocation of Responsibility Matrix				
Item of Responsibility	SFRA Responsibility	Navy Responsibility	Not Resolved	Comments on Defined Terms
I. Known Conditions				
a. As defined in Section 1.4.3	X	No comeback		“Environmental Services” includes “Known Conditions” even if policy is expired or exhausted. “Known conditions” are defined in Tables 3a and 3b of TSRS.
b. Excluded from insurance				
i. CWM, biological, MEC, radiological		X		“Environmental Services” excludes “Navy Retained Conditions.”
ii. ACM, LBP (as defined as Ineligible Work)	X (at own cost)			Included in definition of “Ineligible Work,” which is excluded from “Environmental Services.” Operative language will clarify Grantee performs Ineligible Work at own cost.
iii. Other exclusions			X	“Special Exclusions” are excluded from “Environmental Services.” “Special Exclusions” has a placeholder for mutually agreeable insurance exclusions.
II. Unknown Conditions				
a. Discovered During Course of Remediation.				
i. Insured.	X	No comeback		“Environmental Services” includes “Unknown Conditions Discovered in the Course of Remediation.”
ii. Insured, but	X			...even if policy is expired or exhausted.

Table 2, Allocation of Responsibility Matrix

Item of Responsibility	SFRA Responsibility	Navy Responsibility	Not Resolved	Comments on Defined Terms
exceeds limits/term				
iii. Excluded			X	“Special Exclusions” are excluded from “Environmental Services.” “Special Exclusions” has a placeholder for mutually agreeable insurance exclusions.
b. Discovered Outside Course of Remediation (assuming not Ineligible Work)				
i. Insured.	X			“Environmental Services” includes “Unknown Conditions Discovered Outside the Course of Remediation” to the extent funded by Environmental Insurance Policies.
ii. Insured, but exceeds limits/term.	Tables 3a and 3b	Chemicals other than Tables 3a and 3b		“Special Exclusions” are excluded from “Environmental Services.”
iii. Excluded			X	“Special Exclusions” are excluded from “Environmental Services.” “Special Exclusions” has a placeholder for mutually agreeable insurance exclusions.
c. Uninsured				
i. CWM, biological, MEC, radiological		X		Included in definition of “Navy Retained Conditions,” which are excluded from “Environmental Services.”
ii. ACM, LBP (as defined as Ineligible Work)	X			Included in definition of “Ineligible Work,” which is excluded from “Environmental Services.” Operative language will clarify Grantee performs Ineligible Work at own cost.
iii. Other exclusions			X	“Special Exclusions” are excluded from “Environmental Services.” “Special Exclusions”

Table 2, Allocation of Responsibility Matrix

Item of Responsibility	SFRA Responsibility	Navy Responsibility	Not Resolved	Comments on Defined Terms
				has a placeholder for mutually agreeable insurance exclusions.
III. Navy Retained Conditions				
a. CWM, biological, MEC		X		Included in “Navy Retained Conditions,” which are excluded from “Environmental Services.”
b. Government radiological		X		Encompassed within definition of “Radiological Materials” which are included in “Navy Retained Conditions,” which in turn are excluded from “Environmental Services.”
c. Other radiological				
i. Treated as radiological and special handling		X		Encompassed within definition of “Radiological Materials,” which are included in “Navy Retained Conditions,” which in turn are excluded from “Environmental Services.”
ii. No special handling	X			Non-military products whose radionuclides don’t require special handling are excluded from “Radiological Materials,” which means they are not a “Navy Retained Condition.”
IV. ROD amendments and ESDs				
a. Grantee negligence of CERCLA RODs, both Knowns and Unknowns	X			“Environmental Services” excludes “Special Exclusions.” “Special Exclusions” includes activities associated with ROD amendments and ESDs, unless resulting from Grantee’s negligence.
b. Navy Remedy Failure for Knowns, no Grantee		X		“Environmental Services” excludes “Special Exclusions.” “Special Exclusions” includes activities associated with ROD amendments and

Table 2, Allocation of Responsibility Matrix

Item of Responsibility	SFRA Responsibility	Navy Responsibility	Not Resolved	Comments on Defined Terms
negligence				ESDs resulting from “Navy Remedy Failure.”
c. Unknown	Found during course of remediation or outside the course of remediation for chemicals in Tables 3a and 3b.	If not funded by insurance for chemicals not listed in Tables 3a and 3b.		“Environmental Services” excludes “Special Exclusions.” “.
d. Grantee Request	X			“Environmental Services” excludes “Special Exclusions” and “Navy Retained Conditions.” “Special Exclusions” includes activities associated with ROD amendments and ESDs, unless resulting from a Grantee request not associated with “Navy Remedy Failure.”
V. Regulatory Oversight Costs	X			Paying “Regulatory Oversight Costs” is necessary to achieve “Regulatory Closure,” and is therefore included in “Environmental Services.” They are not excluded as “Ineligible Work” because “Regulatory Oversight Activities” are excluded from the definition of “Regulatory Enforcement Activities,” which is included in “Ineligible Work.”
VI. Long-Term Obligations	X			“Long-Term Obligations” are included within “Environmental Services.”

ACM Asbestos-containing material
CWM Chemical warfare materiel
ESD Explanation of significant differences
LBP Lead-based paint
MEC Munitions and explosives of concern

RACR	Remedial action completion report
ROD	Record of decision
SFRA	San Francisco Redevelopment Agency
TSRS	Technical specifications and requirements statement

TABLE 3a

REASONABLY EXPECTED ENVIRONMENTAL CONDITIONS FOR PARCEL B

The following table lists chemicals that are reasonably expected to be present in media at Parcel B based on the history of past processes, operations, and activities at Parcel B and HPNS in general. Some of the key documents describing past activities are listed below; refer to the HPNS Administrative Record files for additional information that may be applicable or relevant.

ChaduxTt. 2007. "Final Parcel B Technical Memorandum in Support of a Record of Decision Amendment, Hunters Point Shipyard, San Francisco, California." December 12.

Harding Lawson Associates (HLA). 1990. "Preliminary Assessment Other Areas/Utilities, Naval Station Treasure Island Hunters Point Annex, San Francisco, California." October 19.

IT Corporation. 2002. "Draft Waste Consolidation Summary Report, Parcel B, Hunters Point Shipyard, San Francisco, California." October 23.

Naval Energy and Environmental Support Activity (NEESA). 1984. "Initial Assessment Study (IAS) of Hunters Point Naval Shipyard (Disestablished), San Francisco, California." NEESA 13-059. October.

PRC Environmental Management, Inc. (PRC), Levine-Fricke-Recon, Inc. (LFR), and Uribe & Associates (U&A). 1996. "Parcel B Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California." June 3.

Supervisor of Shipbuilding Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1998. "Final PCB Assessment and Removal Report for High Voltage PCB Electrical Devices, Hunters Point Shipyard, San Francisco, California." March 24.

SSPORTS. 1999. "Polychlorinated Biphenyl Survey/Abatement Report." July.

Tetra Tech Inc. (Tetra Tech). 1998. "Final Basewide Environmental Baseline Survey, Revision 01, Hunters Point Shipyard, San Francisco, California." September 4.

Tetra Tech FW Inc. (TtFW). 2004. "Draft Final Post Construction Report: Decontaminate Process Equipment, Conduct Waste Consolidation, and Provide Asbestos Services in Parcels B, C, D, and E, Hunters Point Shipyard, San Francisco, California." July 9.

Table 3a, Parcel B	
Analytical Group	Chemical
METAL	ALUMINUM
METAL	ANTIMONY
METAL	ARSENIC
METAL	BARIIUM
METAL	BERYLLIUM
METAL	CADMIUM
METAL	CHROMIUM
METAL	CHROMIUM VI
METAL	COBALT
METAL	COPPER
METAL	IRON
METAL	LEAD
METAL	MANGANESE
METAL	MERCURY
METAL	MOLYBDENUM
METAL	NICKEL
METAL	SELENIUM
METAL	SILVER
METAL	THALLIUM
METAL	VANADIUM
METAL	ZINC
VOA	1,1,1-TRICHLOROETHANE
VOA	1,1,2,2-TETRACHLOROETHANE
VOA	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
VOA	1,1,2-TRICHLOROETHANE
VOA	1,1-DICHLOROETHANE
VOA	1,1-DICHLOROETHENE
VOA	1,2,4-TRICHLOROBENZENE
VOA	1,2-DICHLOROBENZENE
VOA	1,1-DICHLOROPROPENE
VOA	1,2,4-TRIMETHYLBENZENE
VOA	1,2-DICHLOROETHANE
VOA	1,2-DICHLOROETHENE (TOTAL)
VOA	1,2-DICHLOROPROPANE
VOA	1,3,5-TRIMETHYLBENZENE
VOA	1,3-DICHLOROBENZENE
VOA	1,4-DICHLOROBENZENE
VOA	1,4-DIOXANE
VOA	2-BUTANONE
VOA	2-HEXANONE
VOA	4-METHYL-2-PENTANONE
VOA	ACETONE
VOA	BENZENE
VOA	BROMODICHLOROMETHANE
VOA	BROMOFORM
VOA	BROMOMETHANE
VOA	CARBON DISULFIDE
VOA	CARBON TETRACHLORIDE
VOA	CHLOROBENZENE
VOA	CHLOROETHANE

Table 3a, Parcel B	
Analytical Group	Chemical
VOA	CHLOROFORM
VOA	CHLOROMETHANE
VOA	CIS-1,2-DICHLOROETHENE
VOA	CIS-1,3-DICHLOROPROPENE
VOA	DICHLORODIFLUOROMETHANE
VOA	ETHYLBENZENE
VOA	M,P-XYLENES
VOA	METHYLENE CHLORIDE
VOA	NAPHTHALENE
VOA	N-BUTYLBENZENE
VOA	O-XYLENE
VOA	PARA-ISOPROPYL TOLUENE
VOA	SEC-BUTYLBENZENE
VOA	STYRENE
VOA	TERT-BUTYL METHYL ETHER
VOA	TETRACHLOROETHENE
VOA	TOLUENE
VOA	TRANS-1,2-DICHLOROETHENE
VOA	TRANS-1,3-DICHLOROPROPENE
VOA	TRICHLOROETHENE
VOA	TRICHLOROFLUOROMETHANE
VOA	VINYL ACETATE
VOA	VINYL CHLORIDE
VOA	XYLENE (TOTAL)
SVOA	2-CHLOROPHENOL
SVOA	1-METHYLNAPHTHALENE
SVOA	2-METHYLNAPHTHALENE
SVOA	2,4,6-TRICHLOROPHENOL
SVOA	2,6-DINITROTOLUENE
SVOA	4-METHYLPHENOL
SVOA	4-NITROPHENOL
SVOA	ACENAPHTHENE
SVOA	ACENAPHTHYLENE
SVOA	ACETOPHENONE
SVOA	ANTHRACENE
SVOA	AZOBENZENE
SVOA	BENZALDEHYDE
SVOA	BENZO(A)ANTHRACENE
SVOA	BENZO(A)PYRENE
SVOA	BENZO(B)FLUORANTHENE
SVOA	BENZO(G,H,I)PERYLENE
SVOA	BENZO(K)FLUORANTHENE
SVOA	BENZOIC ACID
SVOA	BENZYL ALCOHOL
SVOA	BIS(2-ETHYLHEXYL)PHTHALATE
SVOA	BUTYLBENZYLPHTHALATE
SVOA	CAPROLACTAM
SVOA	CARBAZOLE
SVOA	CHRYSENE
SVOA	DIBENZ(A,H)ANTHRACENE
SVOA	DIBENZOFURAN

Table 3a, Parcel B	
Analytical Group	Chemical
SVOA	DIETHYLPHTHALATE
SVOA	DI-N-BUTYLPHTHALATE
SVOA	DI-N-OCTYLPHTHALATE
SVOA	DIOXIN CONGENERS
SVOA	FLUORANTHENE
SVOA	FLUORENE
SVOA	FURAN CONGENERS
SVOA	HEXACHLOROETHANE
SVOA	INDENO(1,2,3-CD)PYRENE
SVOA	N-NITROSO-DI-N-PROPYLAMINE
SVOA	N-NITROSODIPHENYLAMINE
SVOA	PENTACHLOROPHENOL
SVOA	PHENANTHRENE
SVOA	PHENOL
SVOA	PYRENE
PEST/PCB	4,4'-DDD
PEST/PCB	4,4'-DDE
PEST/PCB	4,4'-DDT
PEST/PCB	ALDRIN
PEST/PCB	ALPHA-BHC
PEST/PCB	ALPHA-CHLORDANE
PEST/PCB	AROCLOR-1016
PEST/PCB	AROCLOR-1242
PEST/PCB	AROCLOR-1248
PEST/PCB	AROCLOR-1254
PEST/PCB	AROCLOR-1260
PEST/PCB	BETA-BHC
PEST/PCB	DELTA-BHC
PEST/PCB	DIELDRIN
PEST/PCB	ENDOSULFAN I
PEST/PCB	ENDOSULFAN II
PEST/PCB	ENDOSULFAN SULFATE
PEST/PCB	ENDRIN
PEST/PCB	ENDRIN ALDEHYDE
PEST/PCB	ENDRIN KETONE
PEST/PCB	GAMMA-BHC (LINDANE)
PEST/PCB	GAMMA-CHLORDANE
PEST/PCB	HEPTACHLOR
PEST/PCB	HEPTACHLOR EPOXIDE
PEST/PCB	METHOXYCHLOR
PEST/PCB	PCB CONGENERS
TPH	DIESEL RANGE ORGANICS
TPH	GASOLINE RANGE ORGANICS
TPH	MOTOR OIL RANGE ORGANICS
TPH	TPH-UNKNOWN MOTOR OIL
TPH	TRPH
ANION	CHLORIDE
ANION	NITRATE
ANION	ORTHOPHOSPHATE
ANION	SULFATE
OTHER	CHRYSTOTILE ASBESTOS

Table 3a, Parcel B	
Analytical Group	Chemical
OTHER	CYANIDE
OTHER	DIBUTYLTIN
OTHER	MONOBUTYLTIN
OTHER	TETRABUTYLTIN
OTHER	TRIBUTYLTIN

Notes:

BHC	Hexachlorocyclohexane
Chromium VI	Hexavalent chromium
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
PCB	Polychlorinated biphenyl
PEST	Pesticide
SVOA	Semivolatile organic analysis
TPH	Total petroleum hydrocarbons
TRPH	Total recoverable petroleum hydrocarbons
VOA	Volatile organic analysis

TABLE 3b

REASONABLY EXPECTED ENVIRONMENTAL CONDITIONS FOR PARCEL G

The following table lists chemicals that are reasonably expected to be present in media at Parcel G based on the history of past processes, operations, and activities at Parcel G and HPNS in general. Some of the key documents describing past activities are listed below; refer to the HPNS Administrative Record files for additional information that may be applicable or relevant.

Harding Lawson Associates (HLA). 1990. "Preliminary Assessment Other Areas/Utilities, Naval Station Treasure Island Hunters Point Annex, San Francisco, California." October 19.

HLA. 1994. "Draft Final Parcel D Site Inspection Report Naval Station Treasure Island Hunters Point Annex.

Naval Energy and Environmental Support Activity (NEESA). 1984. "Initial Assessment Study (IAS) of Hunters Point Naval Shipyard (Disestablished), San Francisco, California." NEESA 13-059. October.

PRC Environmental Management, Inc. (PRC), Levine-Fricke-Recon, Inc. (LFR), and Uribe & Associates (U&A). 1996. "Parcel D Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California." October 25.

SulTech. 2007. "Final Revised Feasibility Study, Parcel D, Hunters Point Shipyard, San Francisco, California." November 30.

Supervisor of Shipbuilding Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1998. "Final PCB Assessment and Removal Report for High Voltage PCB Electrical Devices, Hunters Point Shipyard, San Francisco, California." March 24.

SSPORTS. 1999. "Polychlorinated Biphenyl Survey/Abatement Report." July.

Tetra Tech Inc. (Tetra Tech). 1998. "Final Basewide Environmental Baseline Survey, Revision 01, Hunters Point Shipyard, San Francisco, California." September 4.

Tetra Tech FW Inc. (TtFW). 2004. "Draft Final Post Construction Report: Decontaminate Process Equipment, Conduct Waste Consolidation, and Provide Asbestos Services in Parcels B, C, D, and E, Hunters Point Shipyard, San Francisco, California." July 9.

Table 3b, Parcel G	
Analytical Group	Chemical
METAL	ALUMINUM
METAL	ANTIMONY
METAL	ARSENIC
METAL	BARIIUM
METAL	BERYLLIUM
METAL	CADMIUM
METAL	CHROMIUM
METAL	CHROMIUM VI
METAL	COBALT
METAL	COPPER
METAL	IRON
METAL	LEAD
METAL	MANGANESE
METAL	MERCURY
METAL	MOLYBDENUM
METAL	NICKEL
METAL	SELENIUM
METAL	SILVER
METAL	THALLIUM
METAL	VANADIUM
METAL	ZINC
VOA	1,1,1-TRICHLOROETHANE
VOA	1,1,2,2-TETRACHLOROETHANE
VOA	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
VOA	1,1,2-TRICHLOROETHANE
VOA	1,1-DICHLOROETHANE
VOA	1,1-DICHLOROETHENE
VOA	1,2,4-TRICHLOROBENZENE
VOA	1,2-DICHLOROETHANE
VOA	1,2-DICHLOROETHENE (TOTAL)
VOA	1,3-DICHLOROBENZENE
VOA	1,4-DICHLOROBENZENE
VOA	1,4-DIOXANE
VOA	2-BUTANONE
VOA	2-HEXANONE
VOA	4-METHYL-2-PENTANONE
VOA	ACETONE
VOA	BENZENE
VOA	BROMODICHLOROMETHANE
VOA	BROMOMETHANE
VOA	CARBON DISULFIDE
VOA	CARBON TETRACHLORIDE
VOA	CHLOROFORM
VOA	CHLOROMETHANE
VOA	CIS-1,2-DICHLOROETHENE
VOA	ETHYLBENZENE
VOA	M,P-XYLENES
VOA	METHYLENE CHLORIDE
VOA	NAPHTHALENE
VOA	O-XYLENE

Table 3b, Parcel G	
Analytical Group	Chemical
VOA	TERT-BUTYL METHYL ETHER
VOA	TETRACHLOROETHENE
VOA	TOLUENE
VOA	TRANS-1,2-DICHLOROETHENE
VOA	TRICHLOROETHENE
VOA	TRICHLOROFLUOROMETHANE
VOA	VINYL CHLORIDE)
VOA	XYLENE (TOTAL)
SVOA	2,4-DIMETHYLPHENOL
SVOA	1-METHYLNAPHTHALENE
SVOA	2-METHYLNAPHTHALENE
SVOA	2-METHYLPHENOL
SVOA	4-METHYLPHENOL
SVOA	ACENAPHTHENE
SVOA	ACENAPHTHYLENE
SVOA	ANTHRACENE
SVOA	BENZO(A)ANTHRACENE
SVOA	BENZO(A)PYRENE
SVOA	BENZO(B)FLUORANTHENE
SVOA	BENZO(G,H,I)PERYLENE
SVOA	BENZO(K)FLUORANTHENE
SVOA	BIS(2-ETHYLHEXYL)PHTHALATE
SVOA	BUTYLBENZYLPHTHALATE
SVOA	CARBAZOLE
SVOA	CHRYSENE
SVOA	DIBENZ(A,H)ANTHRACENE
SVOA	DIBENZOFURAN
SVOA	DI-N-BUTYLPHTHALATE
SVOA	DI-N-OCTYLPHTHALATE
SVOA	DIOXIN CONGENERS
SVOA	FLUORANTHENE
SVOA	FLUORENE
SVOA	FURAN CONGENERS
SVOA	HEXACHLOROETHANE
SVOA	INDENO(1,2,3-CD)PYRENE
SVOA	ISOPHORONE
SVOA	PENTACHLOROPHENOL
SVOA	PHENANTHRENE
SVOA	PHENOL
SVOA	PYRENE
PEST/PCB	4,4'-DDD
PEST/PCB	4,4'-DDE
PEST/PCB	4,4'-DDT
PEST/PCB	ALDRIN
PEST/PCB	ALPHA-CHLORDANE
PEST/PCB	AROCLOR-1242
PEST/PCB	AROCLOR-1254
PEST/PCB	AROCLOR-1260
PEST/PCB	BETA-BHC
PEST/PCB	DELTA-BHC
PEST/PCB	DIELDRIN

Table 3b, Parcel G	
Analytical Group	Chemical
PEST/PCB	ENDOSULFAN I
PEST/PCB	ENDOSULFAN II
PEST/PCB	ENDRIN
PEST/PCB	ENDRIN ALDEHYDE
PEST/PCB	ENDRIN KETONE
PEST/PCB	GAMMA-CHLORDANE
PEST/PCB	HEPTACHLOR
PEST/PCB	HEPTACHLOR EPOXIDE
PEST/PCB	PCB CONGENERS
TPH	DIESEL RANGE ORGANICS
TPH	GASOLINE RANGE ORGANICS
TPH	MOTOR OIL RANGE ORGANICS
TPH	TPH-UNKNOWN MOTOR OIL
TPH	TRPH
ANION	CHLORIDE
ANION	NITRATE
ANION	ORTHOPHOSPHATE
ANION	SULFATE
OTHER	CYANIDE

Notes:

BHC	Hexachlorocyclohexane
Chromium VI	Hexavalent chromium
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethane
PCB	Polychlorinated biphenyl
PEST	Pesticide
SVOA	Semivolatile organic analysis
TPH	Total petroleum hydrocarbons
TRPH	Total recoverable petroleum hydrocarbons
VOA	Volatile organic analysis

Table 4

DOCUMENT MATRIX IDENTIFYING NAVY REVIEW ROLES

The following table identifies documents that must be prepared by the SFRA in accordance with the ETCA and AOC and submitted to the Navy and identifies the Navy's role in reviewing them.

1. Information Only	
a.	AOC correspondence / documents
b.	Public fact sheets
c.	Reuse Plan updates
d.	Notices of Force Majeure and related documents required by the AOC
e.	Statements of Position and other documents submitted by SFRA/Lennar during dispute resolution under the AOC
f.	Notices of Noncompliance and Stop Work, Findings of Default issued under the AOC
g.	Health and safety plans submitted in conjunction with RAWPs
2. Review and Comment	
a.	Soil vapor extraction system reports (monitoring, O&M activities, etc)
b.	Long-term groundwater monitoring reports
c.	Public involvement / community management plans
d.	Waste management plans
e.	Periodic progress reports and schedules including reports in the ETCA and AOC (as provided to the EI underwriter)
f.	Annual IC Compliance Monitoring Reports
3. Review and Concurrence / Approval	
a.	RAWPs, including alternate cover designs (pre- and post-remediation), shoreline revetment designs, and vapor mitigation system designs
b.	O&M plans
c.	Amended PCAPs
d.	RACRs (and interim RACRs related to long-term obligations)
e.	Reports related to long-term obligations (O&M inspection reports, etc)
f.	Soil vapor memorandum to adjust the size of the ARIC for VOC vapors
g.	Five-year review reports (beginning with year 2023)
h.	Amendments to LUC RD reports
i.	Amendments to EI policies
j.	Risk management plans
k.	Certificates of completion

AOC	Administrative Order on Consent
ARIC	Area requiring institutional controls
EI	Environmental insurance
ETCA	Early transfer cooperative agreement
IC	Institutional control
LUC RD	Land use control remedial design

O&M	Operation and maintenance
PCAP	Petroleum corrective action plan
RACR	Remedial action completion report
RAWP	Remedial action work plan
SFRA	San Francisco Redevelopment Agency
VOC	Volatile organic compound

Explanation of Categories:

“Information Only” means the Navy receives the document in its final form and does not receive draft or draft final versions. The Navy will not provide comments on these documents.

“Review and Comment” means the Navy receives draft, draft final, and final versions of the document and may provide comments for SFRA and Environmental Regulatory Agency consideration.

“Review and Concurrence/Approval” means the Navy receives draft, draft final, and final versions of the document. The Navy shall provide comments and the Navy and SFRA must reach agreement on the resolution of Navy’s comments before the document is finalized and the Navy must concur upon the final document.

APPENDIX A APPLICABLE AND RELEVANT DOCUMENTS

The Navy believes that documentation provided with this TSRS represents the most recent and appropriate documentation available for Hunters Point Naval Shipyard and the sites identified in this TSRS. However, if there is a conflict between this information and other site documentation (the existing reports), SFRA is solely responsible for reviewing all available information and forming its independent, professional conclusions and interpretations of site conditions and requirements to meet the objectives of the ETCA. This information is not intended as a substitute for complete analysis of technical data available, nor is it intended to be a guide on how SFRA should address achievement of the performance objectives/standards.

Specific documents may be made available following a request to the Navy, if the documentation can be distributed in a timely manner. Electronic format is not guaranteed.

Applicable and Relevant Documents		
Title	Author	Date
Technical memorandum reporting results of soil gas surveys and delineating the areas requiring institutional controls for VOC vapors	Sealaska	10/10?
Draft Final Remedial Design Package, Parcel B, Excluding Installation Restoration Sites 7 and 18, Hunters Point Shipyard, San Francisco, California	ChaduxTt	7/30/10
Draft Work Plan for Soil Vapor Intrusion Survey, Parcels B, D-1, G, and UC-2, Hunters Point Shipyard, San Francisco, California	Sealaska	7/10
Remedial Action Work Plan for Installation Restoration Sites 07 and 18 at Parcel B; Soil Hotspot Locations at Parcels B, D-1, and G; and Soil Stockpiles at Parcels D-1 and G, Hunters Point Shipyard, San Francisco, California	ERRG	7/10
Draft Final Remedial Design Package, Parcel G, Hunters Point Shipyard, San Francisco, California	ChaduxTt	6/8/10
Final Memorandum, Approach for Developing Soil Gas Action Levels for Vapor Intrusion Exposure at Hunters Point Shipyard, San Francisco, California	ChaduxTt	4/30/10
Final Parcels D-1 and G Groundwater Treatability Study Technical Report, IR-09, IR-33, and IR-71, Hunters Point Shipyard, San Francisco, California	Alliance Compliance	3/10
Final Remedial Design Package, Installation Restoration Sites 7 and 18, Parcel B, Hunters Point Shipyard,	ChaduxTt	1/8/10

Applicable and Relevant Documents		
Title	Author	Date
San Francisco, California		
Draft Petroleum Hydrocarbon Site Closure Report, Parcels D-1, D-2, and G (Former Parcel D), Hunters Point Shipyard, San Francisco, California	ITSI	12/09
Shoreline Protection Technical Memorandum, Installation Restoration Site 7, Parcel B, Hunters Point Shipyard, San Francisco, California	ChaduxTt	4/3/09
Final Record of Decision for Parcel G, Hunters Point Shipyard, San Francisco, California	Navy	2/18/09
Candlestick Point / Hunters Point Development Project, Initial Shoreline Assessment	Moffat and Nichol	2/09
Draft Removal Action Completion Report, Time-Critical Removal Action for the Methane Source Area at IR-07, Parcel B, Hunters Point Shipyard, San Francisco, California	SES-TECH	2/09
Final Amended Parcel B Record of Decision, Hunters Point Shipyard, San Francisco, California	ChaduxTt	1/26/09
Final Removal Action Closeout Report, Time Critical Removal Action, Parcel B, IR-26, Hunters Point Shipyard, San Francisco, California	Insight	1/09
Final Second Five-Year Review of Remedial Actions, Hunters Point Shipyard, San Francisco, California	Jonas	11/11/08
Final Parcel B Construction Summary Report, Hunters Point Shipyard, San Francisco, California	ChaduxTt	7/25/08
Final Base-wide Radiological Work Plan Revision 2, Hunters Point Shipyard, San Francisco, California	TtEC	5/08
Final Parcel B Technical Memorandum in Support of a Record of Decision Amendment, Hunters Point Shipyard, San Francisco, California	ChaduxTt	12/12/07
Revised Final Feasibility Study for Parcel D, Hunters Point Shipyard, San Francisco, California	SulTech	11/30/07
Technical Memorandum for Contamination Delineation at Remedial Unit C5, Revision 1, Hunters Point Shipyard, San Francisco, California	CE2	11/06
Final Phase III Soil Vapor Extraction Treatability Study Report, Parcel B	ITSI	11/06
Final Basewide Radiological Removal Action, Action Memorandum, Revision 2006, Hunters Point Shipyard, San Francisco, California	Navy	4/21/06
Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, Interim Final	DTSC	2/7/05
Historical Radiological Assessment, Volume II, Use of General Radioactive Materials, 1939 to 2003, Hunters Point Shipyard	NAVSEA	8/04
Draft Final Post Construction Report: Decontaminate Process Equipment, Conduct Waste Consolidation, and Provide Asbestos Services in Parcels B, C, D, and E, Hunters Point Shipyard, San Francisco, California	TtFW	7/9/04
Final Cost and Performance Report, Zero-Valent Iron Injection Treatability Study, Building 123, Parcel B	ERRG and	6/04

Applicable and Relevant Documents		
Title	Author	Date
	URS	
Final Community Involvement Plan, Hunters Point Shipyard, San Francisco, California	ITSI and Tetra Tech	4/04
Final Parcel B Shoreline Characterization Technical Memorandum, Hunters Point Shipyard, San Francisco, California	Tetra Tech and ITSI	3/23/04
Final First Five-Year Review of Remedial Actions Implemented at Hunters Point Shipyard, San Francisco, California	Tetra Tech	12/10/03
Draft Waste Consolidation Summary Report, Parcel B, Hunters Point Shipyard, San Francisco, California	IT Corp	10/23/02
Letter Regarding Concurrence that A-Aquifer Groundwater at the Hunters Point Naval Shipyard, San Francisco, Meets the Exemption Criteria in the State Water Resources Control Board Source of Drinking Water Resolution 88-63. From Mr. Curtis Scott, Water Board. To Mr. Keith Forman, Base Realignment and Closure Environmental Coordinator, Naval Facilities Engineering Command	RWQCB	9/25/03
Final Soil Vapor Extraction Confirmation Study Summary, Building 123, Installation Restoration Site 10, Parcel B, Hunters Point Shipyard, San Francisco, California	Tetra Tech	8/19/03
Five-Year Review Process in the Superfund Program EPA/540/F/02/004	EPA	4/03
Draft Phase II Soil Vapor Extraction Treatability Study Report, Building 123, IR-10, Parcel B, Hunters Point Shipyard, San Francisco, California	IT Corp	2/14/02
Definition of the Installation Restoration Site 25 Boundary. Memorandum from Mr. Richard Mach, BRAC Environmental Coordinator, to Hunters Point Shipyard administrative record file	Navy	2/1/02
Information Advisory Clean Imported Fill Material	DTSC	10/01
Comprehensive Five-Year Review Guidance EPA/540/R/01/007	EPA	6/01
Final Technical Memorandum, Parcel B Storm Drain Infiltration Study, Hunters Point Shipyard, San Francisco, California	Tetra Tech	2/28/01
Final Remedial Design Documents Amendment, Parcel B, Hunters Point Shipyard, San Francisco, California	Tetra Tech	2/20/01
Final Technical Memorandum, Distribution of the Bay Mud Aquitard and Characterization of the B-Aquifer in Parcel B, Hunters Point Shipyard, San Francisco, California	Tetra Tech	2/19/01
Final Explanation of Significant Differences, Parcel B, Hunters Point Shipyard, San Francisco, California	Navy	5/4/00
Final Remedial Design Documents, Parcel B, Hunters Point Shipyard, San Francisco, California	Tetra Tech and MK	8/19/99
Draft Final Technical Memorandum, Nickel Screening and Implementation Plan, Hunters Point Shipyard,	Tetra Tech	8/4/99

Applicable and Relevant Documents		
Title	Author	Date
San Francisco, California		
Polychlorinated Biphenyl Survey/Abatement Report, Hunters Point Shipyard, San Francisco, California	SSPORTS	7/99
Completion Report, Exploratory Excavations, Hunters Point Naval Shipyard, San Francisco, California	IT Corp	6/99
Final Basewide Environmental Baseline Survey, Revision 01, Hunters Point Shipyard, San Francisco, California	Tetra Tech	9/4/98
Final Explanation of Significant Differences, Parcel B, Hunters Point Shipyard, San Francisco, California	Navy	8/24/98
Final PCB Assessment and Removal Report for High Voltage PCB Electrical Devices, Hunters Point Shipyard, San Francisco, California	SSPORTS	3/24/98
Final Record of Decision, Parcel B, Hunters Point Shipyard, San Francisco, California	Navy	10/7/97
Hunters Point Shipyard Redevelopment Plan	SFRA	7/14/97
Parcel B Feasibility Study, Final Report, Hunters Point Shipyard, San Francisco, California	PRC	11/26/96
Parcel D Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California	PRC and others	10/25/96
Estimation of Hunters Point Shipyard Groundwater Ambient Levels Technical Memorandum, Hunters Point Shipyard, San Francisco, California.	PRC	9/16/96
Parcel B Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California	PRC and others	6/3/96
Draft Calculation of Hunters Point Ambient Levels, Hunters Point Annex, San Francisco, California	PRC	8/17/95
Draft Final Parcel D Site Inspection Report Naval Station Treasure Island Hunters Point Annex, San Francisco, California	HLA	1994
Preliminary Assessment Other Areas/Utilities, Naval Station Treasure Island Hunters Point Annex, San Francisco, California	HLA	10/19/90
Initial Assessment Study of Hunters Point Naval Shipyard (Disestablished), San Francisco, California	NEESA	10/84

BRAC Base realignment and closure
DTSC Department of Toxic Substances Control
EPA U.S. Environmental Protection Agency
ERRG Engineering/Remediation Resources Group
HLA Harding Lawson Associates
ITSI Innovative Technical Solutions, Inc.
MK Morrison Knudsen Corporation

NAVSEA	Naval Sea Systems Command
NEESA	Naval Energy and Environmental Support Activity
PCB	Polychlorinated biphenyl
PRC	PRC Environmental Management, Inc.
RWQCB	San Francisco Bay Regional Water Quality Control Board
SFRA	San Francisco Redevelopment Agency
SSPORTS	Supervisor of Shipbuilding Conversion and Repair, Portsmouth, Virginia, Environmental Detachment
TtFW	Tetra Tech FW Inc.
VOC	Volatile organic compound

ATTACHMENT 1

Environmental Work Instruction EVR.4, Implementing and Maintaining the CERCLA
Administrative Record and Compendium at NAVFAC Southwest